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DOCUMENT REVIEW: TECHNICAL MEMORANDUMNO. 2 . HUMAN HEALTH RISK ASSESSMENT EXPOSURE SCENARIOS WALNUT CREEK PRIORITY DRAINAGE OPERABLE UNIT 6 ROCKY FLATS PLANT

GENERAL COMMENT

Some exposure pathways are identified as negligible and risk via these pathways will not be evaluated. It is recommended that pathways be identified as complete or incomplete and qualitative judgements not be made. Certain pathways may only produce negligible risk levels relative to other pathways but if a pathway is complete it should be evaluated in the risk assessment. Regulators have correctly stated in the past that all complete exposure pathways should be evaluated even if their contribution to overall risk is expected to be small. Also, which pathways pose the greatest risks for receptors is often a contaminant-specific principle and may not be best addressed for the entire OU when it is composed of 21 Individual Hazardous Substance Sites (IHSS).

SPECIFIC COMMENTS

1. Page 2-2, Section 2.0, Para. 2. Colorado Department of Health (CDH) has criticized the use of local newspaper citations as the source of information regarding the future of RFP and has opposed the statement that the Rocky Flats Local Impacts Initiative (RFLII) is attempting to attract businesses to make use of existing RFP buildings. As these statements appear in this TM also, the same criticisms can be expected.

2. Page 2-8, Section 2.6, Paragraph 2. It is said that no contaminant attributable vegetative stresses have been identified at RFP. This statementis supported by a DOE, 1980 Citation. The authors should provide more recent information.

3. Page 4-8, Section 4.6.1, Para. 2. It would seem that unless the system is contaminant limited, deposition of resuspended particles and their associated contaminants presents an additive pathway. The statement that deposition is replacement rather than addition, however, is made with regard to the on-site receptor where contamination is not likely to be limited. Therefore, it would seem that receptors are exposed to both contaminants that have been taken up by plants and deposited material.

4. Page 4-9, Section 4.6.3, Para. 1. The description of the current on-site worker scenario does not distinguish whether the worker currently works at the site or whether the scenario is hypothetical.

5. Page 4-11, Section 4.6.4 It is not clear why the inhalation of volatiles in indoor air is included for the future on-site office/industrial worker when the discussion presented indicates that there is a general absence of groundwater and that field screening of OU 6 soils has not detected contamination by volatiles. It should be noted, however that page 4-7, para. 1 states that there appears to be little or no contamination by volatile organic compounds (VOCs). This has a different meaning from what is reported on page 4-11. Please revise or clarify as necessary.

6. Page 5-3, Section 5.1.1, third bullet. The assumption of 30 working days for the construction worker scenario is not conservative. Many industrial construction projects have much longer durations, and since the land use issue for this area is not resolved, a more conservative assumption should be considered (e.g., six months).

7. Page 5-5, Section 5.1.3, third bullet. The fraction ingested (FI) from the contaminated source is assumed to be 0.06 for the current on-site worker. Although the exposure frequency for this scenario is 5 days/week for 50 weeks (section 5.1.1), justification needs to be provided for the 0.06 FI value. CDH has commented in the past on this issue. In addition, the exposure frequency for the future ecological researcher is limited to 4 days, 13 weeks per year for 2.5 years. Therefore, it is reasonable to assume an FI of one for this receptor.